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REMARKS

Claims 1 through 9 and new Claims 10 and 11 are pending in the application.

Claim 1 has been amended to recite that the overlayer A advantageously has a continuous crosslinked acrylic coating D disposed thereon. Support for this amendment can be found in the Application-as-filed, for example on Page 22, Table 2.

Claim 1 has also been amended to reflect that the inventive films beneficially exhibit a coefficient of friction for such coated overlayer A against itself of less than 0.37. Support for this amendment can be found in the Application-as-filed, for example on Page 15, Table 1 in conjunction with Page 23, Table 3.

Claim 1 has additionally been amended to reflect that the overlayer A comprises polymer, thereby providing antecedent basis for new Claim 10. Support for this amendment can be found in the Application-as-filed, for example on Page 5, lines 21 through 22.

Claim 5 has been amended to conform to United States practice.

Claim 9 has been amended to depend from Claim 1, thereby correcting a typographical error.

Claims 10 and 11 have been added to complete the record for examination and highlight advantageous embodiments of the invention.

Claim 10 is directed to advantageous embodiments of the invention in which the polymer used to form the overlayer A consists essentially of polyethylene terephthalate, polyethylene 2,6-naphthalate, poly(1,4-cyclohexanedimethylene terephthalate) or polyethylene 2,6-naphthalate

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bibenzoate. Support for Claim 10 can be found in the Application-as-filed, for example on Page 4, lines 10 through 17 and Page 5, lines 21 through 22.

Claim 11 is directed to beneficial coatings in accordance with the invention that include the comonomers N-methylolacrylamide or N-methylolmethacrylamide in order to develop crosslinking. Support for Claim 11 can be found in the Application-as-filed, for example in Claim 5 as-filed.

The Specification has been amended on Page 23, Table 3 to correct apparent typographical errors. Table 3 has more specifically been amended to delete (i) the value noted for D/D Coefficient of Friction for CE1 and (ii) the value for Roughness Ra of D for CE1. As noted on Page 21, line 5 of the Application-as-filed, Comparative Example 1 (noted as CE1 in Table 3) did not include a coating D.

Reexamination and reconsideration of this application, withdrawal of all rejections, and formal notification of the allowability of the pending claims are earnestly solicited in light of the remarks which follow.

Submission of Terminal Disclaimer

Claims 1 through 9 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting in light of United States Patent No. 6,855,395 and co-pending United States Application No. 10/739,808. Solely to advance prosecution of the case and without addressing the merits of the rejection, Applicants respectfully submit herewith a terminal disclaimer, as suggested by the Examiner. More particularly, Applicants submit herewith a terminal disclaimer that disclaims the terminal part of any patent granted on the above-identified application extending beyond the expiration date of the full statutory term which may ultimately result from United States Patent No. 6,855,395 or any patent resulting from co-pending United States Application No. 10/739,808.

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Accordingly, Applicants respectfully request withdrawal of the foregoing double patenting rejection upon entry of the enclosed terminal disclaimer.

Section § 112 Rejection

Claim 8 stands rejected under 35 USC § 112 over the phrase "such as." Applicants respectfully submit that Claim 8 as-filed does not recite the phrase "such as." The Examiner's attention is kindly directed to the PTO PAIR System, Image File Wrapper, Mail Room Date: 1/15/04; Document Description: Claims.

Claim 5 does, however, contain the phrase "such as." Claim 5 has been amended to delete the noted the phrase and associated comonomers, thereby bringing Claim 5 into conformance with United States practice. Claim 11, dependent on Claim 5, has been added to recite the subject matter removed from Claim 5.

Applicants accordingly respectfully request withdrawal of this rejection.

Claim 9 As-Amended is Novel
in Light of the Art of Record

Claim 9 stands rejected as being anticipated by Ullmann's Encyclopedia of Industrial Chemistry (Ullmann) or The Encyclopedia of Polymer Science and Engineering (Polymer Science).

Claim 9 has been amended to address a typographical error. In particular, Claim 9 has been amended to depend from Claim 1. Out of an abundance of caution, Applicants make of record that that neither Ullmann or Polymer Science teach or suggest Claim 9 as-amended.

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Applicants' Representative also takes this opportunity to apologize for any inconvenience that the extreme breadth of Claim 9 as-submitted may have caused.

*The Claimed Invention is Patentable
in Light of the Art of Record*

Claims 1 through 9 stand rejected over United States Patent No. 5,824,394 ("US 394") to Kinoshita, et al. in light of United States Published Application No. 2002/0160168 ("APP 168") to Peiffer et al. or United States Published Application No. 2002/0160171 ("APP 171") to Peiffer et al.

Claims 1 through 9 stand rejected over European Patent Application 1 236 568 ("EP 568") to Peiffer et al. and Japanese Patent Application JP 2002-307634 ("JP 634") in light of US 394 and further in view of APP 168 and APP 171. Applicants respectfully note that EP 568 is the European equivalent of APP 168 and that JP 634 is the Japanese equivalent of APP 168. Consequently, remarks directed to APP 168 are intended to distinguish EP 568 and JP 634 as well.

It may be useful to briefly consider the invention before addressing the merits of the rejection.

Biaxially oriented polyester films which feature very good optical properties are known. Unfortunately, such films generally suffer from inferior processing performance and winding quality. Unexpectedly, Applicants have found that the application of a specified coating to at least one surface of films having an outer layer containing a moderate amount of particles of a particular size provides distinctly improved roll formation and film processability, without undue sacrifice to the outstanding optical properties of the film. Applicants note that the application of

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the specified coating to the surface of films containing a moderate amount of particles of a particular size significantly lowers the coefficient of friction of the resulting film. Applicants hypothesize that this decrease in the coefficient of friction yields the improvement in roll formation and film processability.

Accordingly, the claims are directed to biaxially oriented polyester films having at least one overlayer A. The overlayer A includes an amount of from 500 to 2500 ppm of fillers having a median particle diameter d_{50} of from 10 to 60 nm and/or from 1.0 to 5 μm . In advantageous embodiments, the overlayer A has a continuous crosslinked acrylic coating D disposed on its surface which imparts a coefficient of friction for the coated overlayer A against itself of less than 0.37.

The primary references do not teach or suggest the claimed invention.

US 394 is generally directed to multilayered polyester films that provide improved adhesion to subsequent acrylic or urethane coatings. (Col. 1, lines 58 – 60; Col. 2, lines 16 – 21 and Col. 5, lines 1 – 4). The impetus of US 394 is the use of an outer layer A that is either amorphous or has a crystalline melting peak of less than 230 °C. (Col. 3, lines 19 – 25). The working examples of US 394 include a blend of dimethyl isophthlate and butanediol within the outer layer A. (Col. 14, line 64 – Col. 15, line 26 in conjunction with Col. 16, lines 30 – 39).

The outer layer A may also include particles, such as particles having a diameter as low as 0.001 microns. (Col. 3, lines 47 – 48). The particles may be present within the outer layer A in amounts of up to 10 % by weight. (Col. 3, lines 49 – 51).

In contrast to the filled and coated outer layer of the claimed invention, US 394 notes that the thickness of the outer layer A has been tailored to avoid blocking. (Col. 3, line 67 – Col. 4, line 3). US 394 then goes on to provide peeling forces it associates with blocking. (Col. 13, lines 40 – 50). US 394 is altogether silent as to the coefficient of friction of its films, however.

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US 394 thus does not teach or suggest the recited films including an overlayer A having filler in a maximum amount of 2500 ppm (0.25 wt %). Nor does US 394 teach or suggest the recited coated overlayers having a coefficient of friction against themselves of less than 0.37.

And US 394 most certainly does not teach or suggest films in which the polymer used to form the overlayer A consists essentially of polyethylene terephthalate, polyethylene 2,6-naphthalate, poly(1,4-cyclohexanedimethylene terephthalate) or polyethylene 2,6-naphthalate bibenzoate, as recited in Claim 10. In fact, US 394 teaches away from such films by requiring its outer layer to either be amorphous or have a crystalline melting peak of less than 230 °C.

The remaining references do not cure the deficiencies within US 394.

In contrast to the combined filler and coating of the claimed invention, APP 168 (and EP 568 and JP 634) is directed to pigment systems which provide improved winding properties. [0002 and 0048] The pigment system may be included within the films of APP 168 in amounts of up to 0.5 wt %. [0031] APP 168 merely generically notes the use of coatings to impart a variety of additional properties. [0076]. APP 168 broadly states that its films have a coefficient of friction of less than 0.5. [0080]. However, the working examples of APP 168 indicate the minimum coefficient of friction achieved was 0.40. [0119]

APP 171 is likewise directed to pigment systems which provide improved winding properties. [0002 and 0038] The pigment system may be included within the films of APP 171 in amounts of up to 0.5 wt %. [0022] APP 171 also merely generically notes the use of coatings to impart a variety of properties. [0059] APP 171 broadly states that its films have a coefficient of friction of less than 0.5. [0063] However, the working examples of APP 171 indicate the minimum coefficient of friction achieved was 0.38. [0110]

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APP 168 (and EP 568 and JP 634) and APP 171 thus do not teach or suggest the recited films including an overlayer A having filler in a maximum amount of 2500 ppm (0.25 wt %). Nor do APP 168 (and EP 568 and JP 634) and APP 171 teach or suggest that such coated overlayers containing a maximum of 0.25 wt % particles would have a coefficient of friction against themselves of less than 0.37.

There would have been no motivation to have combined US 394 and APP 168 or APP 171. Applicants respectfully submit that merely because the references can be combined is not enough, there must still be a suggestion. US 394 is directed to films providing improved adhesion to subsequent coatings. APP 168 and APP 171 are directed to particle systems providing improved winding performance. These are altogether different issues.

However, even if combined (which Applicants submit should not be done), the claimed invention would not result. US 394 discloses films incorporating an amorphous or moderate melting outer layer. US 394 further teaches the incorporation of particles in amounts of up to 10 wt %. APP 168 and APP 171 disclose uncoated films incorporating particles in amounts of up to 0.5 wt% to improve winding performance.

Consequently, even if combined, the recited films including an overlayer A having filler in a maximum amount of 2500 ppm (0.25 wt %) would not result. And the recited coated overlayers having a coefficient of friction against themselves of less than 0.37 would most certainly not result.

Nor does the combination teach or suggest films in which the polymer used to form the overlayer A consists essentially of polyethylene terephthalate, polyethylene 2,6-naphthalate, poly(1,4-cyclohexanedimethylene terephthalate) or polyethylene 2,6-naphthalate bibenzoate, as recited in Claim 10.

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Accordingly, Applicants respectfully submit that Claims 1 through 10 are patentable in light of US 394, APP 168 (as well as its equivalents, i.e. EP 568 and JP 634) and APP 171, considered either alone or in combination.

CONCLUSION

It is respectfully submitted that Applicants have made a significant and important contribution to the art, which is neither disclosed nor suggested in the art. It is believed that all of pending Claims 1 through 11 are now in condition for immediate allowance. It is requested that the Examiner telephone the undersigned if any questions remain to expedite examination of this application.

It is not believed that fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional fees are necessary to allow consideration of this paper, the fees are hereby authorized to be charged to Deposit Account No. 50-2193.

Respectfully submitted,

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CERTIFICATE OF FACSIMILE TRANSMISSION

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office at facsimile number (571) 273 - 8300 on October 25, 2005.

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